

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (currently amended) A method for providing a design pattern comprising:  
providing a plurality of design patterns having differing types, each of the design patterns comprising a description of a design issue addressed by the particular design pattern and of a solution provided by the particular design pattern;  
receiving input defining a programming problem;  
determining a matching one of the [[a type]] types of design patterns based on the received input;  
providing a plurality of instances of said matching type of design pattern; and  
choosing a member of said plurality of instances.  
receiving input indicating a selection of a member of the plurality of instances;  
and  
returning the selected member of the plurality of instances.
2. (currently amended) The method of claim 1 wherein said differing types [[is]] are selected from the group of pattern types consisting of a presentation, a business, a service, an integration, and a hybrid.
3. (canceled)
4. (canceled)
5. (canceled)
6. (original) The method of claim 1 wherein said type is a hybrid.

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

7. (original) The method of claim 6 wherein said hybrid is a business / service hybrid.
8. (original) The method of claim 6 wherein said hybrid is a presentation / business hybrid.
9. (original) The method of claim 6 wherein said hybrid is a business / Integration hybrid.
10. (original) The method of claim 1 wherein said member is a mediator view design pattern.
11. (original) The method of claim 1 wherein said member is a service to workers design pattern.
12. (original) The method of claim 1 wherein said member is a mutable conversational business entity design pattern.
13. (original) The method of claim 1 wherein said member is a mutable conversational aggregator business entity design pattern.
14. (original) The method of claim 1 wherein said member is an immutable business object builder design pattern.
15. (original) The method of claim 1 wherein said member is a mutable conversational value object business entity.
16. (original) The method of claim 1 wherein said member is a immutable conversational business list handler design pattern.

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

17. (original) The method of claim 1 wherein said member is a business delegate design pattern.
18. (original) The method of claim 1 wherein said member is a service workflow controller design pattern.
19. (currently amended) The method of claim 1 wherein said member is a service island proxy integrator design pattern, wherein the design issue comprises providing connectivity with a service that does not provide an application programming interface.
20. (currently amended) A design pattern locator comprising:
  - a determiner configured to identify a design pattern type from a plurality of types based on an input computing problem, wherein each of the design pattern types defines a problem addressed by the design pattern, a solution provided for the problem by the design pattern, and sample code;
  - a provider configured to display a plurality of instances of said design pattern type; and
  - a chooser configured to choose a member of said plurality of instances.
21. (original) The design pattern locator of claim 20 wherein said design pattern type is a presentation.
22. (original) The design pattern locator of claim 20 wherein said design pattern type is a business.
23. (original) The design pattern locator of claim 20 wherein said design pattern type is a service.

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

24. (original) The design pattern locator of claim 20 wherein said design pattern type is an integration.
25. (original) The design pattern locator of claim 20 wherein said design pattern type is a hybrid.
26. (original) The design pattern locator of claim 25 wherein said hybrid is a business / service hybrid.
27. (original) The design pattern locator of claim 25 wherein said hybrid is a presentation / business hybrid.
28. (original) The design pattern locator of claim 25 wherein said hybrid is a business / integration hybrid.
29. (original) The design pattern locator of claim 25 wherein said member is a mediator view design pattern.
30. (original) The design pattern locator of claim 25 wherein said member is a service to workers design pattern.
31. (original) The design pattern locator of claim 25 wherein said member is a mutable conversational business entity design pattern.
32. (original) The design pattern locator of claim 25 wherein said member is a mutable conversational aggregator business entity design pattern.
33. (original) The design pattern locator of claim 25 wherein said member is an immutable business object builder design pattern.

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

34. (original) The design pattern locator of claim 25 wherein said member is a mutable conversational value object business entity.
35. (original) The design pattern locator of claim 19 wherein said member is a immutable conversational business list handler design pattern.
36. (original) The design pattern locator of claim 20 wherein said member is a business delegate design pattern.
37. (original) The design pattern locator of claim 20 wherein said member is a service workflow controller design pattern.
38. (currently amended) The design pattern locator of claim 20 wherein said member is a service island proxy integrator design pattern, wherein the problem comprises providing connectivity with a service that does not provide an application programming interface.
39. (currently amended) A computer program product comprising:  
a computer usable medium having computer readable program code embodied therein configured to locate a design pattern, said computer program product comprising:  
computer readable code configured to cause a computer to provide a plurality of design patterns having differing types, each of the design patterns comprising a description of a design issue addressed by the particular design pattern and of a solution provided by the particular design pattern;  
computer readable code configured to cause a computer to receive input defining a programming problem;  
computer readable code configured to cause a computer to determine a type a matching one of the types of design patterns by comparing the received input with the

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

design issues of the differing design pattern types:

computer readable code configured to cause a computer to provide a plurality of instances of said matching type of design pattern; and

computer readable code configured to cause a computer to choose a member of said plurality of instances.

40. (original) The computer program product of claim 39 wherein said type is a presentation.
41. (original) The computer program product of claim 39 wherein said type is a business.
42. (original) The computer program product of claim 39 wherein said type is a service.
43. (original) The computer program product of claim 39 wherein said type is an integration.
44. (original) The computer program product of claim 39 wherein said type is a hybrid.
45. (original) The computer program product of claim 44 wherein said hybrid is a business / service hybrid.
46. (original) The computer program product of claim 44 wherein said hybrid is a presentation / business hybrid.
47. (original) The computer program product of claim 44 wherein said hybrid is a business / integration hybrid.

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

48. (original) The computer program product of claim 39 wherein said member is a mediator view design pattern.
49. (original) The computer program product of claim 39 wherein said member is a service to workers design pattern.
50. (original) The computer program product of claim 39 wherein said member is a mutable conversational business entity design pattern.
51. (original) The computer program product of claim 39 wherein said member is a mutable conversational aggregator business entity design pattern.
52. (original) The computer program product of claim 39 wherein said member is an immutable business object builder design pattern.
53. (original) The computer program product of claim 39 wherein said member is a mutable conversational value object business entity.
54. (original) The computer program product of claim 39 wherein said member is a immutable conversational business list handler design pattern.
55. (original) The computer program product of claim 39 wherein said member is a business delegate design pattern.
56. (original) The computer program product of claim 39 wherein said member is a service workflow controller design pattern.

Serial No. 09/872,362  
Amdt. Dated October 6, 2004  
Reply to Office Action of July 6, 2004

57. (currently amended) The computer program product of claim 39 wherein said member is a service island proxy integrator design pattern, wherein the design issue comprises providing connectivity with a service that does not provide an application programming interface.
58. (new) The method of claim 1, wherein each of the design patterns further comprises sample code for implementing the solution.
59. (new) The method of claim 1, wherein each of the design patterns further defines participants in the particular design pattern including defining roles and responsibilities of the participants and defines constraints for the particular design pattern.
60. (new) The method of claim 1, wherein the matching one is determined by comparing the received definition of a programming problem with the descriptions of design issues for the plurality of design patterns.